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Radiological and Environmental Research Division

Argonne National Laboratory

CENTER FOR HUMAN RADIOBIOLOGY

Radiologist's Report

CHR # 40-010 Date read: November 15, 1974

Patient's Name _____

Post-exhumation Radiographs.

Chest and ribs: There are healed fractures of the left 9th and 10th ribs. All the ribs on both sides show many discrete rounded very dense deposits, 1 to 3 mm. They all appear to be on bone surfaces. The sternum likewise shows very many discrete very dense deposits up to 1 mm. Some of them are on bone surfaces and some in soft tissues near the bone.

Cervical spine: (C1 to C6) No abnormality.

Dorsal spine: (T1 to T6, T8 to T12) There is osteoporosis. A few small very dense deposits on surfaces of some of the bodies.

Lumbar spine: (L2 to L5). Osteoporosis is present. A few very small dense deposits on surfaces of bodies.

Sacrum: Many very dense deposits 3 to 6 mm in upper portions.

Right humerus: No abnormality within the bone, one small dense deposit on surface, humeral head.

Right and left radius and ulna: No abnormalities.

Right and left hand and wrist: A few small very dense deposits in the distal portions of right middle and ring fingers only.

Right femur: Slight osteoporosis.

Left femur: A single dense deposit 3 mm on surface, supracondylar area.

Right tibia and fibula: Osteoporosis in tibia.

Left tibia and fibula: A few 3 - 4 mm dense deposits in upper portions of these bones.

Right and left scapula and clavicle: No abnormalities.

Right foot and ankle: A few very dense deposits 2 to 3 mm in the distal parts of the right toes.

Left foot and ankle: No evidence of abnormality.

Right Innominate bone: Many round very dense deposits 2 to 4 mm in the ischium and ilium. Osteoporosis.

Left innominate: Osteoporosis present, single very dense deposit 6 mm.

Skull vault: No evidence of abnormality.

Skull base: The dorsum sellae is absent (previously removed in handling).

The sinuses and mastoids are normal.

Impression: Osteoporosis is present. There is no evidence of bone changes resembling those which may be seen in persons exposed to radium. An entirely different abnormality is present, namely, that there are very many very small very dense deposits on the surfaces of a number of the bones, and other such deposits in the soft tissues very close to the bone surfaces. This abnormality is attributed to the plutonium which has been administered during the subject's life. The radiographic pattern is unique.

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